

Docket No. AUS920030736US1

CLAIMS:

What is claimed is:

1. A method of converting the characteristics under which a logical volume is stored on a first physical volume group, said method comprising the steps of:
 - allocating a second physical volume group having the desired characteristics for storing said logical volume;
 - setting up said second physical volume group as a temporary mirror of said first physical volume group, wherein:
 - reads of said logical volume from an application are directed solely to said first physical volume group and
 - write to said logical volume from an application are directed to both said first physical volume group and said second physical volume group; and
 - synchronizing said logical volume from said first physical volume group to said second physical volume group.
2. The method of Claim 1, further comprising, during said synchronizing step, blocking access by an application to a portion of said logical volume whenever said portion is being synchronized.

Docket No. AUS920030736US1

3. The method of Claim 1, further comprising, after completion of said synchronizing step, dropping said temporary mirroring and indicating said second physical volume group to be the location of said logical volume.
4. The method of Claim 1, wherein at least one of said first physical volume group and said second physical volume group comprise a plurality of physical volumes.
5. The method of Claim 1, wherein at least one of said first physical volume group and said second physical volume group is striped.
6. The method of Claim 1, wherein at least one of said first physical volume group and said second physical volume group is not striped.
7. The method of Claim 1, wherein both said first physical volume group and said second physical volume group are striped and a stripe characteristic is changed during said conversion.
8. A computer system, comprising:
 - a first processor connected as a server;
 - a plurality of client processors connected to said first processor;
 - a logical volume stored on a first physical volume group and connected to be accessed from said first processor and said plurality of client processors, said

Docket No. AUS920030736US1

first physical volume having a first set of fixed characteristics;

a second physical volume group having a second set of fixed characteristics that are different from said first set of fixed characteristics;

first instructions for setting up said second physical volume group as a temporary mirror of said first physical volume group, wherein:

reads of said logical volume from an application are directed solely to said first physical volume group and

writes to said logical volume from an application are directed to both said first physical volume group and said second physical volume group; and

second instructions for synchronizing said logical volume from said first physical volume group to said second physical volume group.

9. The computer system of Claim 8, further comprising, in said synchronizing step, third instructions for blocking access by an application to a portion of said logical volume whenever said portion is being synchronized.

10. The computer system of Claim 8, further comprising fourth instruction for dropping said temporary mirroring and indicating said second physical volume group to be the location of said logical volume after completion of said synchronizing step.

Docket No. AUS920030736US1

11. The computer system of Claim 8, further comprising fifth instructions for handling striping of said physical volume groups.

12. A computer program product on a computer readable medium, said computer program product comprising:

first instructions for setting up a first physical volume group having a first set of fixed characteristics as a temporary mirror to a second physical volume group having a different set of fixed characteristics, said second volume group containing a logical volume, wherein:

reads of said logical volume from an application are directed solely to said second physical volume group and

write to said logical volume from an application are directed to both said first physical volume group and said second physical volume group; and

second instructions for synchronizing said logical volume from said second physical volume group to said first physical volume group.

13. The computer program product of Claim 12, further comprising third instructions for blocking, during said synchronizing step, access by an application to a portion of said logical volume whenever said portion is being synchronized.

Docket No. AUS920030736US1

14. The computer program product of Claim 12, further comprising fourth instructions for dropping said temporary mirroring and indicating said second physical volume group to be the location of said logical volume after completion of said synchronizing step.